

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
EP-W-11-052/0001/003PAGE OF
2 2

NAME OF OFFEROR OR CONTRACTOR

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>OAR/OAP/CCD US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD Washington DC 20460 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711</p> <p>FOB: Destination Period of Performance: 03/12/2012 to 06/30/2013</p>				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT		1. CONTRACT ID CODE		PAGE OF PAGES 1 3	
2. AMENDMENT/MODIFICATION NO. 002		3. EFFECTIVE DATE 01/11/2013		4. REQUISITION/PURCHASE REQ. NO. PR-OAR-13-00436	
5. PROJECT NO. (If applicable)		7. ADMINISTERED BY (If other than Item 6)		CODE HP0D	
6. ISSUED BY HP0D US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		7. ADMINISTERED BY (If other than Item 6) HP0D US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		CODE HP0D	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) SCIENCE APPLICATIONS INTERNATIONAL CORPORATION Attn: (b)(4) 1710 SAIC DRIVE (b)(4) MCLEAN VA 221023703		(x) 9A. AMENDMENT OF SOLICITATION NO.		9B. DATED (SEE ITEM 11)	
CODE (b)(4)		FACILITY CODE		10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-11-052 0001 10B. DATED (SEE ITEM 13) 03/08/2012	

11. THIS ITEM ONLY APPLIES TO AMENOMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended. ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required) Net Increase: \$275,517.00
See Schedule

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: FAR 52.243-3
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: (b)(4)

TOPO: SEAN HOGAN

The purpose of this modification is to incorporate the activities listed below into the subject Statement of Work under Task 3 (Finalize, Test, Deploy and Operate the Verification Tool). As an equitable adjustment for the subject changes, the task order ceiling price is hereby increased by \$275,517. The subject task order is fully funded in the amount of \$825,701.05.

The following tasks are hereby incorporated into the subject Statement of Work:

1. Preparing IVP to verify previously deferred data elements for subparts: C, D, HH, TT,
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christopher Jenson	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA (Signature of Contracting Officer)	16C. DATE SIGNED

CONTINUATION SHEET

REFERENCE NO. OF DOCUMENT BEING CONTINUED
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2 3

NAME OF OFFEROR OR CONTRACTOR

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>DD, FF, II, and SS. This will entail updating and developing verification plans, coding the new verification checks, and testing the software before launch.</p> <p>2. Preparing iVP to verify subpart MM, this will be received through e-GGRT for the first time beginning in April 2013. Again, this will entail developing a verification plan, coding the new checks, and testing the software before launch.</p> <p>3. Incorporating subpart W checks in iVP, which SAIC was not able to do for RY2011 due to schedule constraints. This will entail coding the checks in the same way other checks were coded into iVP and testing the software before launch.</p> <p>4. Incorporating verification checks for Track 1 simplified subparts that will report in RY2012 using ;Smart; forms. This should represent a maximum of 5 such subparts that will need to be added to iVP.</p> <p>5. Preparing iVP to handle multi-year reporting. Thus far, the focus has been to develop iVP to verify reports for RY2011 and RY2012, but additional development will be required to ensure that iVP is fully prepared to verify and manage data for ongoing use beyond RY2012.</p> <p>6. Making improvements to iVP and the associated Correspondence Tracking system based on feedback received from users during the RY2011 reporting cycle.</p> <p>7. Continued operation of iVP throughout the period of performance.</p> <p>LIST OF CHANGES: Reason for Modification : Supplemental Agreement for work within scope Total Amount for this Modification: \$275,517.00 New Total Amount for this Version: \$825,701.05 New Total Amount for this Award: \$825,701.05 Obligated Amount for this Modification: \$275,517.00 New Total Obligated Amount for this Award: \$825,701.05</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 Continued ...</p>				

CONTINUATION SHEET

 REFERENCE NO. OF DOCUMENT BEING CONTINUED
 EP-W-11-052/0001/002

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 3 3

NAME OF OFFEROR OR CONTRACTOR

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Total Amount changed from \$550,184.05 to \$825,701.05 Obligated Amount for this modification: \$275,517.00 NEW ACCOUNTING CODE ADDED: Account code: 13-14-B-58F7-101A46XQ3-2505-1358FC3541-001 Beginning Fiscal Year 13 Ending Fiscal Year 14 Fund (Appropriation) B Budget Organization 58F7 Quantity: 0 Amount: \$275,517.00 Percent: 33.36765 Subject To Funding: N Payment Address: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711 Delivery Location Code: OAR/OAP/CCD OAR/OAP/CCD US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD Washington DC 20460 USA Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711 FOB: Destination Period of Performance: 03/12/2012 to 03/11/2013				

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 2	
2. AMENDMENT/MODIFICATION NO. 001		3. EFFECTIVE DATE 03/12/2012		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)
6. ISSUED BY HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		CODE HPOD		7. ADMINISTERED BY (If other than Item 6) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460		CODE HPOD
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) SCIENCE APPLICATIONS INTERNATIONAL CORPORATION Attn: (b)(4) 1710 SAIC DRIVE (b)(4) MCLEAN VA 221023703				(x) 9A. AMENDMENT OF SOLICITATION NO.		
				9B. DATED (SEE ITEM 11)		
				x 10A. MODIFICATION OF CONTRACT/ORDER NO. EP-W-11-052 0001		
				10B. DATED (SEE ITEM 13) 03/08/2012		
CODE (b)(4)		FACILITY CODE				

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)
See Schedule Net Decrease: -\$48,509.95

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: Mutual Agreement of Parties
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

DUNS Number: (b)(4)

TOPO: SEAN HOGAN

The purpose of this modification is to change the subject Statement of Work, incorporating the revised deliverable schedule (included as attachment). As a consequence of the change, the maximum amount set forth in the subject task order schedule is hereby reduced by \$48,509.95. The new maximum amount for the subject task order is \$550,184.05. Additionally, funding in the amount of \$48,509.95 is hereby de-obligated from the subject task order. The subject task order is hereby fully funded in the amount of \$550,184.05.

LIST OF CHANGES:

Total Amount for this Modification: -\$48,509.95

Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Christopher Jensen	
15B. CONTRACTOR/OFFEROR (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA (Signature of Contracting officer)	16C. DATE SIGNED

CONTINUATION SHEET	REFERENCE NO. OF DOCUMENT BEING CONTINUED EP-W-11-052/0001/001	PAGE 2 OF 2
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NAME OF OFFEROR OR CONTRACTOR
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	<p>New Total Amount for this Award: \$550,184.05 Obligated Amount for this Modification: -\$48,509.95 New Total Obligated Amount for this Award: \$550,184.05</p> <p>CHANGES FOR LINE ITEM NUMBER: 1 Total Amount changed from \$598,694.00 to \$550,184.05 Obligated Amount for this modification: -\$48,509.95</p> <p>CHANGES FOR DELIVERY LOCATION: OAR/OAP/CCD Amount changed from \$598,694.00 to \$550,184.05</p> <p>CHANGES FOR ACCOUNTING CODE: 12-13-B-58F7-101A46XQ3-2505-1258FC2548-001 Amount changed from \$598,694.00 to \$550,184.05</p> <p>Delivery Location Code: OAR/OAP/CCD OAR/OAP/CCD US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD Washington DC 20460 USA</p> <p>Payment: RTP Finance Center US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive Durham NC 27711</p> <p>FOB: Destination Period of Performance: 03/12/2012 to 03/11/2013</p>				

Task	Deliverable	Due Date
Task 1.1	Attend kick-off meeting	Within one week of approval of task order
Task 1.2	Project Timeline	Within two weeks of approval of task order
Task 1.3	Monthly Status Report	Within two weeks of the end of each 4-week billing cycle
Task 1.4	Attend End of POP meeting	At least two weeks before end of POP, per TOPO direction
Task 2.1	Meet with EPA Verification Team (VT Transition)	Within two weeks of approval of task order
Task 2.2	Summary of recommendations and proposals to improve the existing verification process and/or systems	Within four weeks of approval of task order
Task 3.1	90% completion of VT coding for all new and updated checks identified for 3/30/2012 reporting	WAIVED
	90% completion of VT coding for all new and updated checks identified for 9/28/2012 reporting	August 3, 2012
Task 3.2	100% completion of VT coding for all checks identified for 3/30/2012 reporting	WAIVED
	100% completion of VT coding for all checks identified for 9/28/2012 reporting	August 27, 2012
Task 3.3	Demonstration of VT for 9/28/2012 reporting	Week of September 17, 2012
Task 3.4	User acceptance testing for EPA and load testing of VT for 3/30/2012 reporting	WAIVED
	User acceptance testing for EPA and load testing of VT for 9/28/2012 reporting	August 27–31, 2012
Task 3.5	Beta version of VT for 3/30/2012 reporting is working	WAIVED
	Beta version of VT for 9/28/2012 reporting is working	September 7, 2012
Task 3.6	Production version of VT for 3/30/2012 reporting is installed and working	WAIVED
	Production version of VT for 9/28/2012 reporting is installed and working	September 21, 2012
Task 3.7	Operate VT for 3/30/2012 reporting	April 16–August 2012
	Operate VT for 9/28/2012 reporting	September 28, 2012–February 2013
Task 7.1	Revised VT and e-GGRT output report templates for 9/28/2012 reporting	September 21, 2012
Task 7.2	Draft, new tracking system	September 7, 2012
Task 7.3	Final, new tracking system	September 21, 2012
Task 8.1	Update instructions for subparts reporting on 3/30/2012	WAIVED
	Finalize instructions for subparts reporting on 3/30/2012	WAIVED
Task 8.2	Drafts and update instructions for subparts reporting on 9/28/2012	July 31, 2012
	Finalize instructions for subparts reporting on 9/28/2012	September 14, 2012
Task 8.3	Training on verification instructions for 3/30/2012 reporting	WAIVED
	Training on verification instructions for 9/28/2012 reporting	September 2012
Task 9.1	No work should be undertaken or travel initiated under this task until a technical directive TD has been issued by the TOPO.	Due dates will be determined in the TD.

ORDER FOR SUPPLIES OR SERVICES

PAGE OF PAGES

1 2

IMPORTANT: Mark all packages and papers with contract and/or order numbers.

1. DATE OF ORDER 03/08/2012		2. CONTRACT NO. (If any) EP-W-11-052		6. SHIP TO:				
3. ORDER NO. 0001		4. REQUISITION/REFERENCE NO. PR-OAR-12-00979		a. NAME OF CONSIGNEE OAR/OAP/CCD				
5. ISSUING OFFICE (Address correspondence to) HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460				b. STREET ADDRESS US Environmental Protection Agency 1200 Pennsylvania Avenue NW Mail Code: 62107J OAP/CCD				
				c. CITY Washington		d. STATE DC	e. ZIP CODE 20460	
7. TO: (b)(4)				f. SHIP VIA				
a. NAME OF CONTRACTOR SCIENCE APPLICATIONS INTERNATIONAL CORPORATION				8. TYPE OF ORDER				
b. COMPANY NAME				<input type="checkbox"/> a. PURCHASE REFERENCE YOUR:				
c. STREET ADDRESS 1710 SAIC DRIVE (b)(4)				<input checked="" type="checkbox"/> b. DELIVERY Except for billing instructions on the reverse, this delivery order is subject to instructions contained on this side only of this form and is issued subject to the terms and conditions of the above-numbered contract.				
d. CITY MCLEAN				e. STATE VA	f. ZIP CODE 221023703			
9. ACCOUNTING AND APPROPRIATION DATA See Schedule				10. REQUISITIONING OFFICE OAR/OAP/CCD				
11. BUSINESS CLASSIFICATION (Check appropriate box(es)) <input type="checkbox"/> a. SMALL <input checked="" type="checkbox"/> b. OTHER THAN SMALL <input type="checkbox"/> c. DISADVANTAGED <input type="checkbox"/> d. WOMEN-OWNED <input type="checkbox"/> e. HUBZone <input type="checkbox"/> f. SERVICE-DISABLED VETERAN-OWNED <input type="checkbox"/> g. WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOMEN-OWNED SMALL BUSINESS PROGRAM <input type="checkbox"/> h. ECONOMICALLY DISADVANTAGED WOMEN-OWNED SMALL BUSINESS (EDWOSB)							12. F.O.B. POINT Destination	
13. PLACE OF		14. GOVERNMENT B/L NO.		15. DELIVER TO F.O.B. POINT ON OR BEFORE (Date)		16. DISCOUNT TERMS		
a. INSPECTION Destination		b. ACCEPTANCE Destination						
17. SCHEDULE (See reverse for Rejections)								
ITEM NO. (a)	SUPPLIES OR SERVICES (b)			QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
	DUNS Number: (b)(4) TOPO: SEAN HOGAN							
Continued ...								
18. SHIPPING POINT			19. GROSS SHIPPING WEIGHT		20. INVOICE NO.		17(n) TOTAL (Cont. ages)	
21. MAIL INVOICE TO:								
a. NAME RTP Finance Center							\$598,694.00	
b. STREET ADDRESS (or P.O. Box) US Environmental Protection Agency RTP-Finance Center (D143-02) 109 TW Alexander Drive								
c. CITY Durham							17(i) GRAND TOTAL	
d. STATE NC								
e. ZIP CODE 27711							\$598,694.00	
22. UNITED STATES OF AMERICA BY (Signature)					23. NAME (Typed) Christopher Jenson TITLE: CONTRACTING/ORDERING OFFICER			

**ORDER FOR SUPPLIES OR SERVICES
SCHEDULE - CONTINUATION**

PAGE NO

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER

CONTRACT NO.

ORDER NO.

03/08/2012

EP-W-11-052

0001

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY ORDERED (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)	QUANTITY ACCEPTED (g)
0001	<p>Admin Office: HPOD US Environmental Protection Agency Headquarters Procurement Operations Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington DC 20460</p> <p>Accounting Info: 12-13-B-58F7-101A46XQ3-2505-1258FC2548-001 BFY: 12 EFY: 13 Fund: B Budget Org: 58F7 Program (PRC): 101A46XQ3 Budget (BOC): 2505 DCN - Line ID: 1258FC2548-001 Period of Performance: 03/12/2012 to 03/11/2013</p> <p>Support for Development of Verification Process for GHGRP (Solicitation PR-12-OAR-00603)</p>				598,694.00	

TOTAL CARRIED FORWARD TO 1ST PAGE (ITEM 17(H))

\$598,694.00

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION NOT USABLE

OPTIONAL FORM 348 (Rev. 4/2006)

Prescribed by GSA FAR (48 CFR) 53.213(f)

STATEMENT OF WORK

Title: Support for Development of Verification Process for Greenhouse Gas Reporting Program

Task Order Project Officer (TOPO):

Sean Hogan

US Environmental Protection Agency
1200 Pennsylvania Avenue, NW (6207J)
Washington DC 20460
Phone: (202) 343-9233
Fax: (202) 343-2359
E-mail: master.barbora@epa.gov

Alternate TOPO:

Lisa Grogan-McCulloch

US Environmental Protection Agency
1200 Pennsylvania Avenue, NW (6207J)
Washington DC 20460
Phone: (202) 343-9743
Fax: (202) 343-2210
E-mail: Grogan-McCulloch.Lisa@epa.gov

Contracting Officer (CO):

Christopher O. Jenson

U.S. Environmental Protection Agency
1200 Pennsylvania Ave, NW (3803R)
Washington, DC 20460
Phone: (202) 564-3268
Fax: (202) 565-2554
Email: jenson.christopher@epa.gov

I. BACKGROUND

In September 2009, EPA finalized the regulatory action that launched the EPA's Greenhouse Gas Reporting Program (GHGRP). Covered facilities will report 2011 GHG data to EPA on either March 31, 2012 or September 28, 2012, by using a web platform developed by EPA called the electronic GHG Reporting Tool ("e-GGRT") or by submitting a bulk XML file. The GHGRP is an annual reporting program, with report submissions due in subsequent years on March 31 of each year.

GHG data reported under the GHGRP will be verified by EPA. Prior to EPA verification,

reporters are required to self-certify that the data they submit to EPA is truthful, accurate and complete. EPA reviews the GHG data, including emissions data from direct emitters and supporting data submitted from reporters, and verifies that they are complete, accurate, and meet the reporting requirements of this rule. EPA data verification ensures accuracy and completeness, such that EPA and the public are confident in using the data for developing climate policies and potential future regulations. Data that are not entitled to confidential treatment will be published on EPA's website for public analysis.

In implementing verification of GHGRP data, EPA has developed a three step process, described below.

1. **Automated Review of Data.** First, EPA conducts an initial centralized review of the data which is largely automated. The automated review consists of two components. The first component is built in e-GGRT and is designed to provide reporters with real-time feedback before they officially submit their data. The second component is built in stand-alone software, referred to as the Verification Tool (VT), which pulls post-submittal data from e-GGRT and run pre-programmed tests to more closely assess the completeness and accuracy of the data. Both e-GGRT and VT generate output reports to summarize the verification findings and to flag possible errors and inaccuracies for follow-up.
2. **Staff Review of Data.** Second, subpart leads review the output reports, following program-wide instructions on verification priorities and procedures, and notify reporters of any potential errors, discrepancies, or questions. The purpose of this step is for reporters to resubmit their annual reports with corrected data or for the subpart leads to otherwise resolve the flags through analysis and communication with the reporters.
3. **On-Site Visits.** Third, EPA will maintain the option to conduct on-site visits of selected facilities and suppliers, in the event centralized verification identifies issues which warrant site visits to resolve. The purpose of site visits would be to further evaluate reported data based on records that are kept at the facility but not submitted (e.g., GHG monitoring plans), as well as field methods to measure and QA/QC data. To date, EPA has not encountered a situation where an on-site visit is required and it is considered to be unlikely in the future.

To date, EPA has developed and implemented this verification process, with exception for the on-site visits. The scope of this effort has included developing and coding the specifications for all of the checks that the VT used for 28 subparts, including range checks, algorithm logic checks, statistical tests, and substitute data checks. This also included developing the Oracle tables that were used to transfer GHG data and VT output reports between e-GGRT and the VT. Furthermore, this included developing the format and organization of the program-wide verification instructions and extensively researching the availability of outside data sources which could be used to evaluate data quality. In September 2011, the GHGRP received data for Reporting Year 2010 (RY2010), which was the first year that data was collected and successfully

verified by the Program.

As further described in this SOW, future work will entail making updates to the VT and verification process before the GHGRP receives the next round of data in March and September 2012, running the VT and performing other verification procedures in 2012 and future years, and making ongoing improvements to the VT and verification process. With respect to ongoing improvements, EPA is continually striving to more effectively integrate the GHGRP data collection system (e-GGRT) and the verification process. Therefore, while this SOW presents an approach for performing verification, EPA remains open to consider other tools and/or processes that meet the same objectives and schedule.

II. SCOPE

The work outlined under this requirement is consistent with Section 1.2.5 of the Contract Statement of Work.

III. TASKS AND DELIVERABLES

Task 1: Project Management

The Contractor shall provide project management under this task, and shall submit a Monthly Status Report to EPA's TOPO and Contracting Officer (CO) in accordance with the Project Reporting section below. During the Period of Performance (POP), the Contractor shall immediately inform the TOPO and CO by telephone and/or email of any problems that may impede performance along with any corrective action needed by the EPA or the Contractor to solve the problem.

Under this task, the Contractor shall also attend a kick-off meeting, either via conference call or in person, whichever is most cost-effective to the U.S. Government, to discuss the goals and strategy for completing the deliverables. This kick-off meeting will serve as a brainstorming session to clarify the tasks, provide any necessary background material, solicit ideas and feedback from the Contractor, as well as formulate ideas for work to be completed by the Contractor under the Tasks listed below. The contractor shall develop a project timeline based on the statement of work and direction from the TOPO that incorporates the deliverable dates for all tasks. The Contractor, under this task, shall also attend a wrap-up meeting at the end of the POP to discuss work completed under the Tasks.

Deliverables and schedule under Task 1:

Task	Deliverable	Due Date
Task 1.1	Attend kick-off meeting	Within 1 week of approval of Task Order
Task 1.2	Project Timeline	Within 2 weeks of approval of Task Order
Task 1.3	Monthly Status Report	By 10 th business day each month
Task 1.4	Attend End of POP meeting	At least 2 weeks prior to end of POP, per TOPO direction

Task 2: Critical Review of Existing Verification Process (as it pertains to systems development)

EPA successfully verified the first round of data collected through the GHGRP and, in the process, gained a lot of valuable experience which will need to be captured and used to further develop and refine the verification process. To this end, the purpose of this task is for the contractor to develop a thorough understanding of the existing verification process and the

lessons learned during the first round of verification so that opportunities for improvement are identified and addressed, where feasible.

To this end, the contractor shall perform a critical review of the existing GHGRP verification process. The objectives of this review are for the contractor to:

- establish a thorough understanding of the existing verification process and the systems used for verification, correspondence, tracking and reporting;
- identify opportunities to improve the existing process and develop recommendations for both near-term and long-term improvements; and
- develop a strategy to implement improvements while meeting the objectives and schedule described in this SOW.

The outcome of this effort will be a list of recommendations to improve the existing verification process and a proposal for implementing these recommendations. In the event EPA supports one or more of the recommendations, the recommendations will be implemented according to a process and schedule agreed upon by the TOPO.

Deliverables and schedule under Task 2:

Task	Deliverable	Due Date
Task 2.1	Meet with EPA verification team	Within 2 weeks of approval of Task Order
Task 2.2	Summary of recommendations and proposals to improve the existing verification process and/or systems	Within 4 weeks of approval of Task Order

Task 3: Finalize, Test, Deploy, and Operate the Verification Tool (VT)

The VT will need to be updated, tested, deployed and operated in two phases in 2012. Before reporting on March 30, 2012 ("Track 1"), the contractor shall update the VT to reflect any revisions or additions to existing verification plans which were made since reporting and verification of data in 2011. Before reporting on September 28, 2012 ("Track 2"), the contractor shall perform the development and testing required for deploying and operating the VT with 12 additional subparts, along with any additional enhancements.

The VT was designed according to verification plans that were developed for each subpart. Each verification plan specifies checks that are used to assess the quality of the individual data elements reported under a particular subpart. The type of checks includes reasonable range checks, algorithm checks, statistical analyses checks, and completeness checks. Since using the VT to verify RY2010 data, the verification plans have been revised (e.g., modified existing checks and added new checks). The contractor shall update, test and deploy the VT software to incorporate any such changes to the verification plans before EPA receives data on March 30, 2012.

EPA added 12 source categories to the GHGRP which will report data for the first time on September 28, 2012. These source categories are:

- Electronics Manufacturing (Subpart I)
- Fluorinated Gas Production (Subpart L)
- Magnesium Production (Subpart T)
- Petroleum and Natural Gas Systems (Subpart W)
- Use of Electric Transmission and Distribution Equipment (Subpart DD)
- Underground Coal Mines (Subpart FF)
- Industrial Wastewater Treatment (Subpart II)
- Imports and Exports of Equipment Pre-charged with Fluorinated GHGs or Containing Fluorinated GHGs in Closed-cell Foams (Subpart QQ)
- Carbon Dioxide Injection and Geologic Sequestration (Subpart RR)
- Manufacture of Electric Transmission and Distribution (subpart SS)
- Industrial Waste Landfills (Subpart TT) and;
- Injection of Carbon Dioxide (Subpart UU)

The contractor shall assist with developing verification plans for these source categories and, based on these verification plans, the contractor shall update, test and deploy the VT software to incorporate these source categories before EPA receives data on September 28, 2012.

In addition to these updates to the VT, the contractor shall continue to update the VT as the e-GGRT schema and reporting spreadsheets are developed and refined. The contractor shall incorporate new checks and modify existing checks as they are developed throughout the verification process. As directed by the TOPO, the contractor shall continue to update the VT to incorporate system improvements that are developed during and/or after verification of RY2011 data. During final development of the VT, the contractor shall present the TOPO with periodic web-ex demonstrations so that the TOPO can see its progress.

In order to begin testing of the VT integration with e-GGRT, the contractor shall gain access from its server to the NCC server at which e-GGRT and the Oracle tables are housed. The contractor shall test the functionality to populate the Oracle table with XML files as they are generated and to transfer them from the Oracle table to the VT. The contractor shall also test the functionality to populate the Oracle table with the VT output reports as they are generated.

The VT is presently set up on a computer in EPA's CBI room located at 1310 L Street, NW, Washington, DC, and EPA intends to continue hosting the VT on this computer through 2012. The contractor shall install, test and perform all necessary trouble shooting of the updated versions of VT on this computer before the specified reporting deadlines. This includes conducting user acceptance testing and load testing of the VT, developing a working beta version of VT, and finally developing a working production version of VT. In addition, the contractor shall develop instructions and provide training, as needed, on using updated versions of the VT, as well as providing the support needed to use the VT throughout the verification process.

Once EPA receives GHG data, the contractor shall operate the VT in the EPA CBI room and/or provide EPA with support, as needed, to operate the VT. The contractor shall monitor the performance of the VT and conduct any necessary trouble shooting and software updates to ensure its successful operation. The contractor shall generate output reports at a frequency to be determined (e.g., at least weekly).

Deliverables and Schedule under Task 3:

Task	Deliverables	Due Date
Task 3.1	90% completion of VT coding for all checks identified for 3/30/12 reporting	March 9, 2012
	90% completion of VT coding for all new and updated checks identified for 9/28/12 reporting	August 3, 2012
Task 3.2	100% completion of VT coding for all checks identified for 3/30/12 reporting	March 19, 2012
	100% completion of VT coding for all checks identified for 9/28/12 reporting	August 27, 2012
Task 3.3	Demonstration of VT for 3/30/12 reporting	Week of April 2, 2012
	Demonstration of VT for 9/28/12 reporting	Week of September 17, 2012
Task 3.4	User acceptance testing for EPA and load testing of VT for 3/30/12 reporting	March 19 – 23, 2012
	User acceptance testing for EPA and load testing of VT for 9/28/12 reporting	August 27 – 31, 2012
Task 3.5	Beta version of VT for 3/30/12 reporting is working	March 30, 2012
	Beta version of VT for 9/28/12 reporting is working	September 7, 2012
Task 3.6	Production version of VT for 3/30/12	April 6, 2012

	reporting is installed and working	
	Production version of VT for 9/28/12 reporting is installed and working	September 21, 2012
Task 3.7	Operate VT for 3/30/12 reporting	April 6 – August 2012
	Operate VT for 9/28/12 reporting	September 28, 2012 – February 2013

Task 7: Develop Report Formats and Data Tracking Software

As needed, the contractor shall revise and update the existing VT output report templates. To this end, the contractor shall consider lessons learned from the first round of verification to develop a clear and easy-to-use format, as well as consider any unique design considerations associated with the 12 source categories that will begin reporting on September 28, 2012. The contractor shall ensure that updated versions of VT are programmed to generate results into the template formats.

The contractor shall update and maintain the existing verification tracking system (i.e., Sharepoint) or develop a new system that can be used to track the general status of annual GHG reports. The purpose of this tracking system is to provide easy-to-use tracking of the verification status of annual GHG reports, including total number of verification flags, number of open verification issues, number of closed verification issues, and the applicable deadline to resolve all verification issues. Ideally, this system will be set up to automatically retrieve relevant data from existing systems, such as e-GGRT and VT, so that it provides timely updates and minimizes the potential for errors to occur in translating data. However, manually updating this tracking system is an acceptable option while an automated system is being developed, or if developing an automated system is not a feasible option. EPA will rely on this system to coordinate verification activities, provide routine updates to management, and track compliance.

Deliverables and schedule under Task 7.

Task	Deliverable	Due Date
Task 7.1	Revised VT output report templates for 3/30/12 reporting	April 6, 2012
	Revised VT and e-GGRT output report templates for 9/28/12 reporting	September 21, 2012
Task 7.2	Draft tracking system	March 16, 2012
Task 7.3	Final tracking system	April 13, 2012

Task 8: Develop Instructions for Staff Verification

As needed, the contractor shall update program-wide verification instructions for existing subparts and develop instructions for the 12 subparts added in RY2011. Verification instructions will be based on the format and organization that have already been developed. In the instructions, the contractor shall list and update the lists of outside data sets that were identified as a reference for each subpart. The contractor shall also describe the overall verification process for subpart leads, including the order of priority for reviewing reports, the procedures and dates for notifying reporters of potential errors, and the record keeping requirements that subpart leads will need to follow. The contractor shall develop the verification procedures with input and approval from the TOPO.

As needed, the contractor shall provide training on the verification process and associated instructions, either in person or via web-ex.

Deliverables and Schedule under Task 8.

Task	Deliverable	Due Date
Task 8.1	Update instructions for subparts reporting on March 30, 2012	March 26, 2012
	Finalize instructions for subparts reporting on March 30, 2012	April 6, 2012
Task 8.2	Drafts and update instructions for subparts reporting on September 28, 2012	July 31, 2012
	Finalize instructions for subparts reporting on September 28, 2012	September 14, 2012
Task 8.3	Training on verification instructions for reporting on March 30, 2012	March 2012
	Training on verification instructions for reporting on September 28, 2012	September 2012

Task 9: Quick Turn Around / General Verification Support

Under this task, the Contractor shall provide expert support to the TOPO and respond to requests related to verification and compliance tracking for presentation materials, meetings/workshops/training or other communication materials, conferences, technical briefings, or other analyses, often on a quick turn-around basis. The contractor shall also provide general verification support as directed by the TOPO, such as reviewing other verification protocols or other relevant documents, or developing outreach materials related to verification. This task has been provided in recognition of the significant amount of work associated with developing a

verification process in a short time period and that unforeseen issues may arise.

Deliverables and Schedule under Task 9.

Task	Deliverable	Due Date
Task 9.1	No work should be undertaken or travel initiated under this Task until a technical directive TD has been issued by the TOPO.	Due dates will be determined in the TD.

IV. DELIVERABLE DISTRIBUTION

All deliverables shall be submitted to the TOPO at 1310 L Street, NW Washington, D.C. or submitted electronically. Deliverables shall be labeled with the contract number, task order number, and deliverable number. The Contractor shall provide the TOPO with at least one electronic copy of each deliverable.